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ABSTRACT

As part of the National Evaluation of Welfare-to-Work Strategies (NEWWS), the experiences of welfare recipients who find jobs were studied. The study focused on the employment outcomes of 17,055 program group members from 6 of the 10 NEWWS evaluation sites. Data were obtained from unemployment insurance records and the findings of a survey administered 2 years after random assignment for a subsample of 4,709 program group members. Approximately 80% of the NEWWS sample members worked at some point during the 4-year follow-up period. On average, those individuals who found jobs were employed for just over half the follow-up period. A majority experienced one

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or two spells of unemployment. Those individuals who worked relatively continuously throughout the follow-up period started working relatively early in the follow-up period and experienced nearly 50% earnings growth over the 4-year period. The following characteristics were associated with success in sustaining employment: higher education and basic skill levels, more recent work history, and fewer personal barriers. Age, ethnicity, marital status and children, depression levels, and prior welfare receipt had small or negligible effects on ability to find and sustain employment. (Eight substantial tables/figures are included. Five additional tables/figures are appended. The bibliography lists 12 references.) (MN)

The National Evaluation of Welfare-to-Work Strategies

The Experiences of Welfare Recipients Who Find Jobs

**U.S. Department of Health and Human Services
Administration for Children and Families
Office of the Assistant Secretary for Planning and Evaluation**

**U.S. Department of Education
Office of the Under Secretary
Office of Vocational and Adult Education**

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To obtain other publications from the NEWWS Evaluation, go to aspe.hhs.gov/hsp/newws.

I. Introduction

While much attention has been paid to efforts to help welfare recipients find jobs, policymakers and program administrators are increasingly focused on designing interventions that will help welfare recipients stay employed over the long-run. Past research has shown many welfare recipients have relatively unstable work patterns.¹ While many do find work, some eventually lose their jobs and return to the welfare rolls. In addition, past experience indicates that most welfare recipients work in relatively low quality jobs with low wages, few benefits, and little opportunity for advancement. Because of time limits on the receipt of federal cash assistance through the Temporary Assistance for Needy Families (TANF) program, there is a new urgency to develop programs and policies that will help individuals find and keep jobs and stay off the rolls.

To help policymakers design programs that will help individuals sustain employment and potentially move up into better jobs, it is necessary to understand the general patterns of employment for welfare recipients who find jobs and what factors may be related to achieving success. Towards this end, this paper provides a description of the employment patterns of welfare recipients over a four-year follow-up period and the employment patterns and characteristics of those who are most and least successful in sustaining employment. This paper adds new insights into the employment patterns of welfare recipients because of unusually rich and detailed data sources on both the characteristics of individuals who find jobs, the type of jobs they obtain, and their overall employment patterns. It also has a relatively long follow-up period of up to four years and tracks a diverse range of welfare recipients.

II. Background: The NEWWS Evaluation and Data Sources

The National Evaluation of Welfare-to-Work Strategies (NEWWS) is a large scale random assignment evaluation examining the effectiveness of 11 mandatory welfare-to-work programs operated in seven locales.² Three of the sites in the evaluation – Atlanta, Grand Rapids, and Riverside – operated two different programs simultaneously. One was an employment-focused program known as “Labor Force Attachment” (LFA) which emphasized moving individuals quickly into jobs and the other was an education-focused program known as “Human Capital Development” (HCD) which emphasized investing in education and training before entering the labor market. In each site, to measure the effectiveness of the programs, individuals were randomly assigned to a program group which received services and to a control group that did not. The effects of the program are measured by comparing outcomes of the program group and the control group.

¹ See Strawn, Julie and Karin Martinson, *Steady Work and Better Jobs: How to Help Low-Income Parents Sustain Employment and Advance in the Workforce*, (New York, NY: Manpower Demonstration Research Corporation, June 2000) for a current review of the research on the post-employment experiences of welfare recipients.

² For more information on the NEWWS evaluation, see Freedman, Stephen et al, *National Evaluation of Welfare-to-Work Strategies: Evaluating Alternative Welfare-to-Work Approaches: Two-Year Impacts for Eleven Programs*, (Washington, DC: U.S. Department of Health and Human Services and U.S. Department of Education, 2000) a copy of this publication can be obtained at the following website: aspe.hhs.gov/hhs/news/or mdrc.org/welfarereform.

Individuals were randomly assigned to research groups over approximately a two-year period in each site. Random assignment for the sample studied in this paper began in June, 1991, in Riverside, and ended in December, 1993, in Columbus and Portland. The results presented in this paper cover the calendar period of June, 1991 (the first sample member's entry into the study), through December, 1997. Unlike under TANF, individuals in the studied programs did not face a time limit on eligibility for welfare assistance for most of the follow-up period for this study. The programs, however, shared TANF's primary goal of moving welfare recipients into paid work and off assistance.

This paper provides a descriptive analysis of employment outcomes based on data for *program group members only* from six of the NEWWS evaluation sites.³ Overall, the analysis reports on the experiences of 17,055 program group members. Each site is weighted equally and results are presented separately for employment-focused programs (Riverside LFA, Grand Rapids LFA, Atlanta LFA, and Portland) and education-focused programs (Riverside HCD, Grand Rapids HCD, Atlanta HCD, Detroit, and Columbus). Because the results for employment-focused and education-focused programs are similar, in most cases the employment patterns for individuals enrolled in an employment-focused program are presented and discussed in the text and the results for individuals enrolled in education-focused programs are presented in the Appendix.

This paper uses two primary data sources. The first is Unemployment Insurance (UI) records which provide quarterly employment and earnings data over a four-year follow-up period. These records include employment obtained both within and outside of the counties in which sample members were randomly assigned. UI earnings records, however, are not available for out-of-state earnings or for jobs that are not usually covered by the UI system, such as self-employment, domestic service, or informal child care — work which may have been “off the books” — or for employers who do not report earnings. Further, UI records report earnings by calendar quarter — and do not provide start and end dates of employment — and thus often overstate how long people actually worked. In addition, when using UI records to track trends in earnings over time, one cannot distinguish among the several changes in job characteristics (number of hours or weeks of work or hourly wages) that may have affected quarterly earnings.

The second data source — used in selected analyses in this paper — is a survey administered two-years after random assignment for a subsample of 4,709 program group

³Oklahoma is not included in this analysis because the program did not increase employment during follow-up. Results are presented for program group members — who were required to participate in welfare-to-work programs — because the outcomes for this group were considered more similar to the experiences of welfare recipients receiving benefits under today's rules than the experiences of control group members. See Freedman, Stephen, *National Evaluation of Welfare-to-Work Strategies: Four-Year Impacts of Ten Programs on Employment Stability and Earnings Growth* (Washington, DC: U.S. Department of Health and Human Services and U.S. Department of Education, 2000) for the impacts — or the difference between program group and control group members — of welfare-to-work programs on key post-employment outcomes.

members. The survey provides more detailed information on employment and other issues but for a shorter two-year follow-up period.

III. Description of General Employment Patterns

This section examines employment patterns for the sample of program group members who found jobs during the four-year follow-up period. Overall, many sample members worked at some point during the four-year follow-up period: 81 percent of employment-focused program group members and 78 percent of education-focused program group members worked for pay at some point during this time (results not shown). (While this paper primarily focuses on the experiences of sample members who found jobs, the characteristics of the group of welfare recipients who did not find jobs are discussed briefly later in the paper).

A. Duration of Employment over the Follow-up Period

An important measure of success in sustaining employment is the number of quarters program group members were employed over the four-year follow-up period. As discussed above, because this measure is calculated with quarterly UI data, the duration of employment may be overestimated. People who began working or changed jobs during a calendar quarter probably experienced weeks of joblessness during the quarter, which UI records do not capture.

As shown on Table 1, employment-focused program group members who worked during the follow-up period were employed for an average of 8.5 quarters – or just over half of the four-year (or 16 quarter) follow-up period. Education-focused program group members were employed for slightly less time – 8.1 quarters. A vast majority (60 to 70 percent) started working during the first year after they enrolled in the welfare-to-work program.

The average of quarters employed includes an initial period of joblessness when many program group members were participating in program activities designed to help them find jobs. In theory, education programs may require a longer initial investment of time – with the hope that they will result in more stable and/or higher paying employment in the long run. As shown on Table 1, individuals in employment-focused activities typically started working after 2.9 quarters while those in education-focused activities started working after a slightly longer period – 3.6 quarters. To “level the playing field” and judge employment and education-focused on a comparable basis, it is useful to examine the proportion of the follow-up period employed *once* individuals found jobs. Table 1 shows the results for the two types of programs are similar – individuals in both types of programs were employed for almost two-thirds of the remaining follow-up period on average.

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Table 1
Patterns of Employment During Years 1 to 4 for Program Group Members
Who Worked for Pay After Random Assignment, by Type of Program

<u>Employment Outcomes</u>	<u>Employment-Focused Programs</u>	<u>Education-Focused Programs</u>
Quarters employed	8.5	8.1
Started working in (%):		
Year 1	69.3	61.3
Year 2	16.4	20.3
Year 3	9.1	11.0
Year 4	5.2	7.4
Quarters of initial joblessness ^a	2.9	3.6
Percentage of quarters employed from quarter of initial job through end of year 4 ^b	65.4	66.0
Quarters and percent of follow-up employed (%)		
1 to 4 (less than 25%)	27.4	30.2
5 to 8 (26 to 50 %)	23.0	23.9
9 to 12 (51 to 75 %)	22.5	22.9
13 to 16 (76 to 100 %)	27.1	23.0
Employment spells	1.9	1.8
Employment spells (%)		
1	43.2	47.4
2	33.2	31.8
3	17.3	15.2
4 or more	6.3	5.6
Employed at end of year 4 (%)	59.0	59.4
<u>Sample size</u>	<u>5,896</u>	<u>7,667</u>

(continued)

Table 1 (continued)

SOURCE: MDRC calculations from unemployment insurance (UI) records.

NOTES: Employment-focused programs include Atlanta, Grand Rapids, and Riverside LFA and Portland. Education-focused programs include Atlanta, Grand Rapids, and Riverside HCD, Columbus Integrated and Traditional, and Detroit.

Measures shown in this table pertain to sample members who worked for pay for one or more quarters during years 1 to 4. Differences between employment- and education-focused programs are therefore not true experimental comparisons; statistical tests were not performed.

Measures were originally based on estimates of program-control differences that included all members of the NEWWS 4-year impact sample, including zeros for those never employed. Estimates were regression-adjusted using ordinary least squares, controlling for pre-random assignment characteristics of sample members. Programs were weighted equally. Estimates for employed program group members (shown in this table) were obtained by dividing results for all program group members by the proportion who ever worked for pay. The sample size represents the number of employed program group members.

Numbers may not add up to 100% due to rounding.

The quarter of random assignment, quarter 1, may contain some earnings from the period prior to random assignment, so it is excluded from follow-up measures. Thus, year 1 includes quarters 2 through 5; year 2, quarters 6 through 9; year 3, quarters 10 through 13; and year 4, quarters 14 through 17. The follow-up period equals 16 quarters.

^a"Quarters of initial joblessness" is defined as the number of quarters following random assignment (quarter 1) and preceding the first quarter with earnings. Sample members who began working in quarter 2 have 0 quarters of initial joblessness.

^bThe "quarter of initial job" is defined as the first quarter with earnings. The "percentage of quarters from quarter of initial job through the end of year 4" is calculated by: Quarters employed / (16 - quarters of initial joblessness) x 100.

Overall, the NEWWS sample members experienced a diverse range of work patterns. A significant portion of the program group members worked very little during the follow-up period while a roughly similar proportion worked for a large majority of the four-year period (see Table 1). Individuals fell equally into four major groups.

- Approximately one-quarter were employed for 25 percent or less of the four-year follow-up period (1-4 quarters). Roughly half of these individuals (15 percent) were employed in only two quarters or less of the follow-up period (not on table).
- Approximately one-quarter were employed between 26 and 50 percent of the follow-up period (5-8 quarters).
- Approximately one-quarter were employed between 51 and 75 percent of the follow-up period (9-12 quarters).
- The remaining quarter were employed for more than 75 percent of the four-year follow-up period (13-16 quarters). Very few – roughly 8 percent – were employed in all quarters of the follow-up period (not on table).

Later sections of this paper examine factors that are related to whether individuals are more or less successful in sustaining employment.

B. The Number and Duration of Employment Spells

Another important issue in understanding the post-employment experiences of welfare recipients is whether individuals worked continuously or in multiple spells with significant breaks in employment. As discussed above, because this measure is calculated using quarterly UI data, the number of spells may be underestimated. Breaks in employment that do not span at least an entire quarter are not reflected by UI data.

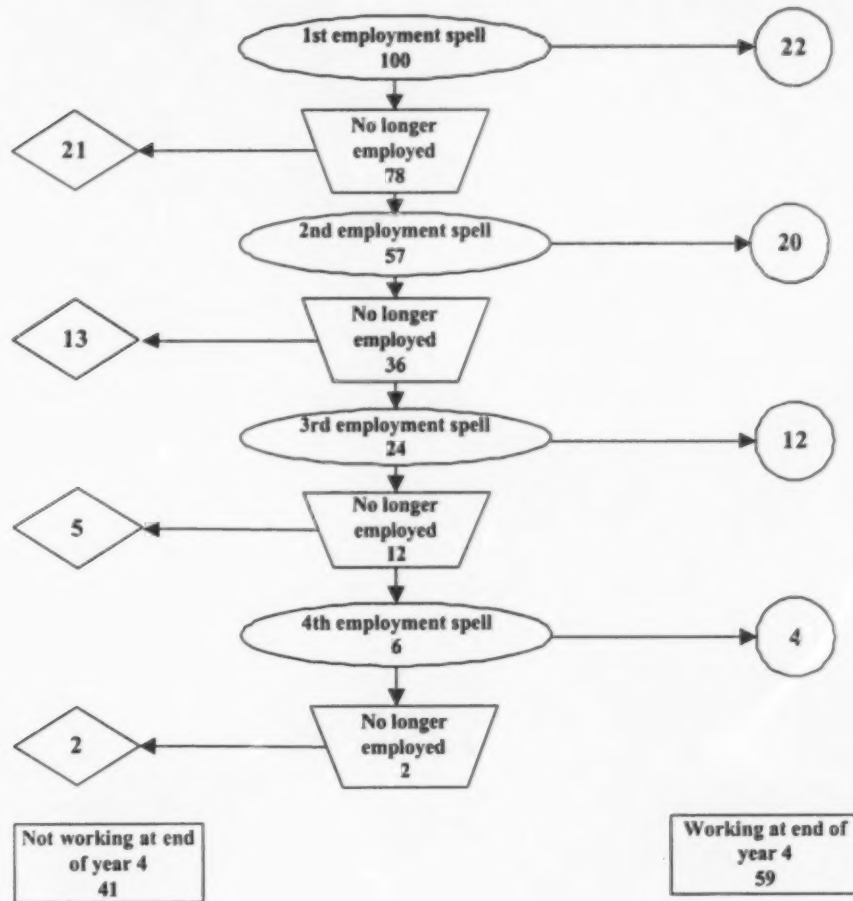
This analysis shows that the vast majority of program group members had one or two spells of employment within the four-year period. As shown on Table 1, a significant portion (43 percent) of the sample members enrolled in employment-focused programs had only one spell of employment. However, over one-third had two spells of employment, 17 percent had three spells, and six percent had four or more spells.

Figure 1 provides more detail on employment spells by tracking the employment experiences of 100 typical employment-focused program group members through different employment spells over the four-year follow-up period (results for education-focused program group members are presented in the Appendix). This analysis focuses on sample members who found jobs during the follow-up period and thus 100 of them have an initial spell of employment. As shown, roughly one-fifth (22/100) of these individuals stayed employed until the end of the follow-up period. The remainder eventually became jobless, with approximately three-quarters (57/78) going into a second

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Figure 1
Employment Experiences of 100 Employment-Focused Program Group Members
Who Worked for Pay During Years 1 to 4

No further employment
through end of year 4

Continued working for
pay through end of year 4



employment spell and one-quarter (21/78) not working again during the follow-up period. Similar patterns are observed over the remaining spells of employment. Of those working in a second spell of employment, approximately one-third (20/57) remained employed through the end of the follow-up period. Of those who lost this job, roughly two-thirds found another job (24/36) and one-third never worked again (13/36) during the follow-up period.

The analysis also examined how long individual spells of employment lasted. Table 2 shows that the first employment spell for employment-focused program group members lasted 5.3 quarters on average. However, almost one-quarter of those who had one spell of employment were still working at the end of the follow-up period. Thus, the first employment spell is truncated and underestimates the actual length of the spell. (Results for other employment spells are similar.)

Table 2 also shows that most of those who ended an employment spell did so relatively quickly. The first spell of employment lasted 3.5 quarters on average for those who stopped working — and roughly one-third were employed for a quarter or less. Those who did find a job after they lost their initial job did so after a relatively long period of unemployment — 2.8 quarters. (Results for other employment spells are similar.)

Overall, while some individuals do experience multiple spells of employment over a four-year period, most (over three-quarters) have only one or two spells of employment during this period. Individuals who ended their employment spells did so after a relatively short period of working. While some did go on to subsequent jobs, it was usually after a relatively long joblessness spell.

C. Earnings and “Successful” Employment Spells

Equally important as the duration and continuity of employment is the quality of the jobs in which welfare recipients work. The quality of jobs over the four-year follow-up period is examined using a number of measures. Because UI records do not provide wages and hours worked, we first examine the extent to which program group members earned \$2,500 or more per quarter — roughly equivalent to working full-time at the current minimum wage.⁴ It should be noted that quarters with low earnings may also reflect situations when an individual worked only a portion of the quarter because they started or stopped a job.

⁴ More precisely, a person would earn \$10,000 per year (or \$2,500 per quarter) if she received \$5 per hour in wages and worked 40 hours per week for 50 weeks. The current minimum wage (in effect since September, 1997) is \$5.15 per hour. A person working 40 hours per week for 50 weeks would earn \$10,300 per year, or \$2,575 per quarter.

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Table 2
Selected Characteristics of the First Employment Spell for
Program Group Members Who Worked for Pay During Years 1 to 4,
by Type of Program

Characteristics of first spell	Employment-Focused Programs	Education-Focused Programs
All first spells		
Quarters employed ^a	5.3	5.3
Quarters employed ^b (%)		
1	27.1	27.4
2 or 3	26.9	26.9
4 or more	46.0	45.6
Employed at end of year 4 (%)		
Employed	22.3	25.6
No longer employed	77.7	74.4
First spells completed before end of year 4		
Quarters employed	3.5	3.4
Quarters employed (%)		
1	33.5	34.9
2 or 3	32.6	33.2
4 or more	33.8	31.9
Quarters to start of second employment spell ^b	2.8	2.7
Sample size	5,896	7,667

SOURCE: MDRC calculations from unemployment insurance (UI) records.

NOTES: See Table 1.

^aMeasure underestimates quarters of employment for sample members still employed at the end of year 4.

^bMeasure calculated for sample members with two or more employment spells.

On average, individuals earned less than \$2,500 per quarter, indicating that many individuals were working less than full-time or at low wages. As shown on Table 3, employment-focused program group members who worked earned \$2,315 on average per quarter of employment. Average earnings were also very low for a substantial portion: roughly 30 percent averaged less than \$1,000 per quarter. Only 20 percent averaged earnings of \$3,000 or more per quarter.

While earnings levels were relatively low, program group members did experience some growth in earnings over the four-year follow-up. For example, average earnings in the first measured quarter of employment for employment-focused program group members

were \$2,178 and climbed to \$2,847 during the last measured quarter – an increase of 30 percent (this analysis excludes quarters when individuals start and stop employment). Because UI records do not provide information on hours worked or hourly wage levels, it cannot be determined whether the earnings gains occur through an increase in wages or an increase in hours worked, or both.

We also examined whether individuals experienced at least one employment spell that was “successful” based on its duration and earnings. Overall, roughly 30 percent were employed in at least one spell that lasted over 4 quarters and where individuals earned \$2,500 or more per quarter. The extent to which individuals had experienced “success” by the end of the follow-up period was also examined. A significant portion – 40 percent – were employed in all four quarters of year 4. However, only twenty-seven percent earned \$10,000 (equivalent of full-time, minimum wage employment for an entire year) in the fourth year of follow-up. Overall, while some program group members experienced at least one successful employment spell (based on a range of measures), many did not.

IV. Patterns of Employment, Earnings, and Welfare Receipt for the Most and Least Successful in Sustaining Employment

This section examines the patterns of employment, earnings, and welfare receipt (see Tables 4 and 5) for employment-focused program group members who were more and less successful in sustaining employment. Results for education-focused program group members are presented in the Appendix and are generally similar.

Most Successful (worked for over 75 percent of the four-year follow-up period): Members of this group found a job relatively quickly – on average they were unemployed less than half a quarter initially. Over one-half worked in one spell of employment and one-third worked in two. Very few were able to work continuously through multiple employment spells. Over 90 percent were still employed at the end of year 4. (Table 4)

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Table 3
Earnings Patterns During Years 1 to 4 for Program Group Members
Who Worked for Pay After Random Assignment, by Type of Program

Employment Outcomes	Employment-Focused Programs	Education-Focused Programs
Average earnings per quarter employed (\$)	2,315	2,360
Earnings per quarter employed (%)		
Less than \$500	13.7	15.6
\$500-\$999	16.8	16.7
\$1,000-\$1,999	31.0	29.4
\$2,000-\$2,999	20.5	19.6
\$3,000-\$3,999	10.4	10.3
\$4,000-\$4,999	4.3	4.2
\$5,000 or more	3.3	4.2
Change in earnings between first and last "measured quarter of employment" ^a		
First quarter (\$)	2,178	2,216
Last quarter (\$)	2,847	2,925
Difference (\$)	669	709
Percentage change (%)	30.7	32.0
Employed in all 4 quarters of year 4 (%)	40.4	40.8
Employed in a spell lasting 4 or more quarters with average earnings per quarter of \$2,500 or more (%)	29.1	28.6
Earned \$10,000 or more in year 4 (%)	27.0	27.5
Sample size	5,896	7,667

SOURCE: MDRC calculations from unemployment insurance (UI) records.

NOTES: See Table 1.

^a"Measured quarters of employment" occur after the first quarter of an employment spell and before the final quarter. "Non-measured quarters" (the first and last quarters of a spell) were excluded from this analysis because they typically include weeks of joblessness (before a job began or after it ended) and are therefore unreliable for estimating changes in average earnings per quarter of employment. The measures in this table were calculated for sample members with two or more "measured quarters of employment". At a minimum, these sample members worked for four consecutive quarters at some point in the follow-up or were employed for three quarters during two separate employment spells.

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Table 4
Patterns of Employment for Employment-Focused Program Group Members
Who Worked for Pay During Years 1 to 4,
by Percent of Follow-Up Period Employed

Employment Outcomes	Percent of Follow-up Employed			
	25% or less	26 to 50%	51 to 75%	76 to 100%
Quarters employed	2.4	6.5	10.5	14.7
Started working in (%):				
Year 1	43.7	56.6	76.4	100.0
Year 2	18.8	25.7	23.6	0.0
Year 3	17.8	17.7	0.0	0.0
Year 4	19.7	0.0	0.0	0.0
Quarters of initial joblessness ^a	5.7	3.5	1.9	0.4
Percentage of quarters employed from quarter of initial job through end of year 4 ^b	35.1	57.0	76.4	94.4
Employment spells	1.4	2.3	2.4	1.6
Employment spells (%)				
1	64.4	25.7	22.3	53.9
2	26.9	35.3	37.1	34.5
3	8.0	27.3	26.1	10.6
4 or more	0.6	11.6	14.6	0.9
Employed at end of year 4 (%)	24.7	52.0	69.5	90.5
Sample size	1,755	1,353	1,281	1,507

(continued)

Table 4 (continued)

SOURCE: MDRC calculations from unemployment insurance (UI) records.

NOTES: Employment-focused programs include Atlanta, Grand Rapids, and Riverside LFA and Portland. Education-focused programs include Atlanta, Grand Rapids, and Riverside HCD, Columbus Integrated and Traditional, and Detroit.

Measures shown in this table pertain to sample members who worked for pay for one or more quarters during years 1 to 4. Differences among subgroups based on percent of follow-up employed are therefore not true experimental comparisons; statistical tests were not performed.

Measures were originally based on estimates of program-control differences for each subgroup. Estimates were regression-adjusted using ordinary least squares, controlling for pre-random assignment characteristics of subgroup members. Programs were weighted equally.

Numbers may not add up to 100% due to rounding.

The quarter of random assignment, quarter 1, may contain some earnings from the period prior to random assignment, so it is excluded from follow-up measures. Thus, year 1 includes quarters 2 through 5; year 2, quarters 6 through 9; year 3, quarters 10 through 13; and year 4, quarters 14 through 17. The follow-up period equals 16 quarters.

^a "Quarters of initial joblessness" is defined as the number of quarters following random assignment (quarter 1) and preceding the first quarter with earnings. Sample members who began working in quarter 2 have 0 quarters of initial joblessness.

^b The "quarter of initial job" is defined as the first quarter with earnings. The "percentage of quarters from quarter of initial job through the end of year 4" is calculated by: $\text{Quarters employed} / (16 - \text{quarters of initial joblessness}) \times 100$.

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Table 5
Patterns of Earnings, Welfare and Food Stamp Receipt, and Employment Stability for
Employment-Focused Program Group Members Who Worked for Pay During
Years 1 to 4, by Percent of Follow-Up Period Employed

Employment Outcomes	Percent of Follow-up Employed			
	25% or less	26 to 50%	51 to 75%	76 to 100%
Average earnings per quarter employed (\$)	1,093	1,553	2,129	2,968
Earnings per quarter employed (%)				
Less than \$500	38.4	10.2	3.1	0.2
\$500-\$999	25.5	25.3	13.7	4.1
\$1,000-\$1,999	23.8	40.9	36.9	22.7
\$2,000-\$2,999	7.0	15.2	27.2	33.0
\$3,000-\$3,999	3.0	5.7	12.7	20.8
\$4,000-\$4,999	1.3	1.1	2.9	11.4
\$5,000 or more	1.1	1.5	3.4	7.7
Change in earnings between first and last "measured quarter of employment"				
First quarter (\$)	260	1,554	2,135	2,451
Last quarter (\$)	286	1,675	2,658	3,623
Difference (\$)	26	121	523	1,172
Percentage change (%)	10.1	7.8	24.5	47.8
Quarters employed with earnings over \$2,500 (%)	11.7	21.8	35.6	55.0
Employed in all 4 quarters of year 4 (%)	2.5	26.8	51.5	80.2
Employed in a spell lasting 4 or more quarters with average earnings per quarter of \$2,500 or more (%)	1.7	16.4	39.0	61.5
Earned \$10,000 or more in year 4 (%)	1.9	11.6	31.6	62.6
Quarters employed (%)				
Received welfare	68.0	58.7	46.0	33.4
Received Food Stamps	73.9	68.6	60.3	47.4
Quarters not employed (%)				
Received welfare	62.9	69.5	67.7	62.2
Received Food Stamps	66.4	73.0	74.1	70.0
Sample size	1,755	1,353	1,281	1,507

(continued)

Table 5 (continued)

SOURCE: MDRC calculations from unemployment insurance (UI) records.

NOTES: See Table 4.

^a"Measured quarters of employment" occur after the first quarter of an employment spell and before the final quarter. "Non-measured quarters" (the first and last quarters of a spell) were excluded from this analysis because they typically include weeks of joblessness (before a job began or after it ended) and are therefore unreliable for estimating changes in average earnings per quarter of employment. The measures in this table were calculated for sample members with two or more "measured quarters of employment". At a minimum, these sample members worked for four consecutive quarters at some point in the follow-up or were employed for three quarters during two separate employment spells.

On average, the group who was most successful in sustaining employment had relatively high earnings compared to other program group members. Their earnings averaged \$3,000 per quarter over the follow-up period and close to 20 percent averaged \$4,000 or more per quarter (see Table 5). Members earned \$2,500 or more per quarter in over half of the quarters they worked. They also experienced a substantial growth in earnings over the four-year follow-up period of close to 50 percent, although it cannot be determined whether this earnings growth occurred through an increase in hourly wages or hours worked, or both.

Those who were most successful in sustaining employment continued to rely on public assistance when they obtained jobs, although to a much lesser degree than the other groups (Table 5). They received cash assistance and Food Stamps in 33 percent and 47 percent, respectively, of the quarters in which they worked. These data may not always reflect instances where individuals are combining work and welfare. Rather, they could reflect situations where an individual leaves a job and goes back on welfare. A majority – over 60 percent – received cash assistance in the months they were not working (a result that did not vary much across the four groups).

Moderately Successful (employed between 51 and 75 percent of the follow-up period):

The majority of this group started working in the first year of the follow-up period, although some became employed in the second year. They were much more likely to experience multiple spells of employment. One-third had two spells of employment and over one-third had three or more. This group experienced a moderate level of earnings (averaging \$2,129 per quarter) and some earnings growth (approximately 25 percent). This group had higher rates of cash assistance and Food Stamps receipt in the quarters in which they worked than those who were most successful.

Limited Success (employed between 26 and 50 percent of the follow-up period): These program group members exhibited similar employment patterns to those who were moderately successful: nearly three-fourths of this group had two or more spells of employment. However, this group had lower levels of earnings (\$1,553 per quarter), minimal earnings growth (8 percent), and used public assistance programs at higher rates when they were working.

Least Successful (employed 25 percent or less of the follow-up period): Members of this group experienced the longest spells of initial joblessness. They started working well into the follow-up period (i.e. during the second year of follow-up period). Almost two-thirds of this group worked in only one employment spell over the follow-up period. One-quarter of these individuals started working so late in the follow-up period that they were still employed at the end of the follow-up period, indicating the actual length of time employed for this group is somewhat truncated. The least successful group had very low earnings on average (\$1,093 per quarter), very little earnings growth, and high rates of cash assistance and Food Stamps receipt when they were working (these benefits were used in over two-thirds of the quarters they were working). These results are likely to reflect that the least successful group often was not employed throughout the entire quarter.

In sum, this analysis clearly shows that those who were most successful in sustaining employment exhibited very different employment and earnings patterns than those who were moderately and least successful. Interestingly, they achieved their success by staying in their initial employment spell or experiencing only one break in employment. This group also experienced substantial earnings growth over the follow-up period. Those who were least successful also only had one spell of employment but they were unable to continue working over the long-run. This group had very low earnings and, accordingly, had relatively high rates of participation in cash assistance and Food Stamps. The middle groups were more likely to experience multiple spells of employment and joblessness and had moderate levels of earnings and earnings growth.

V. Individual and Job Characteristics for the Most and Least Successful in Sustaining Employment

It is important for policymakers and program administrators to understand which factors are associated with sustained and with sporadic employment. To shed light on this issue, this section examines several key questions for groups who were successful, moderately successful, had limited success, and were least successful in sustaining employment. First, do these groups differ in background characteristics likely to affect success in the labor market, such as educational attainment or prior work experience? Second, did members of the most successful group obtain better jobs initially, i.e. with higher hourly wages and fringe benefits? Finally, was the most successful group more likely to use transitional Medicaid and child care?

The findings described here should be seen as suggestive of the factors that are important to sustaining employment and do not establish a causal relationship. This analysis also does not assess which job characteristics or individual characteristics are *most* important in determining whether an individual can sustain employment. For example, more job-ready individuals may find better first jobs, which enables them to sustain employment.

A. Individual Characteristics

Table 6 summarizes variation among the four groups across key demographic characteristics. It also shows demographic characteristics for those who did not find jobs during the follow-up period – these are discussed later in the paper. Demographic data were collected at the time of random assignment.

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Table 6
Selected Characteristics of Employment-Focused Program Group Members,
By Percent of Follow-Up Employed During Years 1 to 4

Characteristic	Percent of Follow-up Employed					Total
	Never Employed	25% or less	26 to 50%	51 to 75%	76 to 100%	
Age (%)						
Under 19	0.3	1.7	2.5	2.6	1.2	1.6 ***
19-24	12.2	22.7	23.2	23.9	20.5	20.4 ***
25-34	48.7	50.2	50.2	49.5	49.5	49.6
35-44	28.5	21.3	21.1	21.3	25.2	23.5 ***
45 or over	10.4	4.2	3.1	2.8	3.6	4.9 ***
Under 30	35.7	48.8	51.3	53.5	47.9	47.2 ***
Over 30	64.3	51.3	48.7	46.5	52.1	52.8 ***
Average age (years)	33.3	30.3	29.8	29.6	30.6	30.8
Ethnicity (%)						
White	41.8	43.5	44.7	45.0	41.0	43.1
Hispanic	12.6	10.9	8.3	8.6	10.2	10.2 ***
Black	41.1	43.2	43.7	43.5	46.1	43.5 *
Black Hispanic	0.1	0.2	0.4	0.3	0.1	0.2
Native American/Alaskan Native	1.5	1.2	1.7	1.1	1.2	1.4
Asian/Pacific Islander	2.5	0.7	0.9	0.9	1.1	1.2 ***
Other	0.4	0.3	0.3	0.7	0.3	0.4
Family status						
Marital status (%)						
Never married	43.5	51.2	52.3	52.8	50.0	49.9 ***
Married, living with spouse	5.9	3.9	2.6	3.0	2.6	3.7 ***
Separated	24.5	23.0	21.8	21.7	24.3	23.1
Divorced	24.0	21.0	21.7	21.9	22.4	22.2
Widowed	2.1	0.9	1.6	0.6	0.8	1.2 ***

(continued)

Table 6 (continued)

Characteristic	Percent of Follow-up Employed					Total
	Never Employed	25% or less	26 to 50%	51 to 75%	76 to 100%	
Number of children (%)						
1	38.3	40.9	44.0	42.0	42.2	41.4 **
2	32.3	32.8	30.1	35.0	32.9	32.6
3 or more	29.4	26.3	25.8	23.0	24.9	26.0 ***
Has any child (%)						
Age 0-5	52.8	61.4	60.1	62.0	59.0	59.0 ***
Age 6-11	56.1	50.3	50.4	48.8	50.6	51.3 ***
Age 12-18	39.6	31.7	29.1	30.6	32.5	32.8 ***
Age of youngest child (%)						
2 or under	15.8	24.3	26.7	27.7	23.1	23.4 ***
3 to 5	36.9	37.1	33.4	34.2	36.0	35.6
6 or over	47.3	38.6	39.9	38.0	41.0	41.0 ***
Had a child as a teenager (%)	30.9	40.6	40.9	42.5	38.3	38.6 ***
Education status						
Received high school diploma or GED (%)	51.1	54.7	58.1	65.0	72.2	60.0 ***
Highest degree/diploma earned (%)						
GED*	9.4	10.6	11.3	12.2	10.4	10.7
High school diploma	36.8	39.4	40.4	45.4	51.0	42.5 ***
Technical/AA/2-year college	3.6	3.9	5.4	6.0	9.5	5.6 ***
4-year (or more) college	1.3	1.1	1.0	1.6	1.6	1.3
None of the above	48.9	45.1	41.8	34.9	27.5	39.8 ***
Highest grade completed in school (average)	10.8	11.1	11.2	11.5	11.6	11.2

(continued)

Table 6 (continued)

Characteristic	Percent of Follow-up Employed					Total
	Never Employed	25% or less	26 to 50%	51 to 75%	76 to 100%	
Enrolled in education or training at time of random assignment (%)	9.8	16.1	21.3	22.5	19.4	17.6 ***
Baseline literacy and math tests (%)						
Low score on either literacy or math test	56.3	48.0	44.8	43.0	38.0	46.1 ***
Low score on literacy test	31.0	25.0	23.9	22.1	20.0	24.4 ***
Low score on math test	52.4	43.8	39.4	37.7	33.7	41.5 ***
Low score on both literacy and math tests	27.1	20.8	18.4	16.9	15.7	19.9 ***
Passed both literacy and math tests	43.7	52.1	55.2	57.0	62.0	54.0 ***
Educational Risk (%)						
Low (high school diploma and pass literacy and math)	32.1	37.0	38.7	42.7	51.0	40.3 ***
Medium (either high school diploma or pass literacy and math)	32.6	34.4	36.9	37.1	33.2	34.7 *
High (no high school diploma and didn't pass literacy or math)	35.3	28.6	24.4	20.2	15.8	25.0 ***
Labor force status						
Worked full time for 6 months or more for one employer (%)	63.9	67.1	71.7	74.2	78.9	71.0 ***
Employed during the quarter before random assignment (%)	8.1	16.4	24.4	29.6	40.2	23.4 ***
Any earnings in past 12 months (%)	19.3	34.1	43.4	53.7	61.5	41.9 ***
Employed at time of random assignment (%)	4.3	6.7	8.8	10.5	17.1	9.4 ***
Public assistance status						
Received welfare during the quarter before random assignment (%)	83.8	82.3	82.5	78.9	76.7	80.9 ***

(continued)

Table 6 (continued)

Characteristic	Percent of Follow-up Employed					Total
	Never Employed	25% or less	26 to 50%	51 to 75%	76 to 100%	
Total prior AFDC receipt (%) ^b						
None	0.4	0.4	0.5	0.5	0.3	0.4
Less than 1 year	21.1	23.1	22.8	25.1	27.7	23.9 **
1 year or more but less than 2 years	9.8	13.2	15.7	17.1	16.6	14.4 ***
2 years or more but less than 5 years	26.6	29.1	29.7	28.9	28.5	28.5
5 years or more but less than 10 years	22.0	19.6	18.7	18.5	16.9	19.2 ***
10 years or more	20.1	14.6	12.7	9.9	10.0	13.6 ***
Most disadvantaged recipient (%) ^c	32.6	23.2	16.8	11.6	8.4	18.8 ***
Raised as a child in a household receiving AFDC (%)	25.5	27.4	25.4	27.8	23.2	25.9 **
First spell of AFDC receipt (%) ^d	13.7	14.8	16.7	17.1	18.4	16.1 ***
Received Food Stamps in the year prior to random assignment (%)	82.3	84.9	85.2	85.2	85.0	84.5
Housing status						
Current housing status (%)						
Public housing	14.5	11.0	10.7	11.7	10.6	11.7 ***
Subsidized housing	13.4	14.6	16.1	17.5	18.7	16.0 ***
Emergency or temporary housing	2.5	1.6	2.3	1.6	1.8	1.9
None of the above	69.6	72.9	70.9	69.2	69.0	70.4 *

(continued)

Table 6 (continued)

Characteristic	Percent of Follow-up Employed					Total
	Never Employed	25% or less	26 to 50%	51 to 75%	76 to 100%	
POS family or personal problem scale (%)						
No barrier	71.0	79.6	84.8	87.0	90.1	82.6 ***
Barrier	29.0	20.4	15.2	13.0	9.9	17.4 ***
POS family attachment scale (%)						
No barrier	62.1	66.6	73.9	74.7	80.5	71.6 ***
Barrier	37.9	33.4	26.1	25.3	19.5	28.4 ***
POS depressive symptoms scale (%)						
No barrier	61.0	61.2	63.8	60.1	66.6	62.6 **
Moderate barrier	22.4	24.1	21.8	25.5	22.1	23.2
High barrier	16.6	14.6	14.4	14.4	11.3	14.2 **
POS locus of control scale (%)						
No barrier	66.5	74.3	76.0	78.1	83.2	75.8 ***
Barrier	33.5	25.7	24.0	21.9	16.8	24.2 ***
Sample size	1,579	1,755	1,353	1,281	1,507	7,475

(continued)

Table 6 (continued)

SOURCE: MDRC calculations from information routinely collected by welfare staff and from unemployment insurance (UI) earnings records.

NOTES: Employment-focused programs include Atlanta, Grand Rapids, and Riverside LFA and Portland. Education-focused programs include Atlanta, Grand Rapids, and Riverside HCD, Columbus Integrated and Traditional, and Detroit.

Programs were weighted equally in calculations of background characteristics. Sample sizes may vary because of missing values.

The Private Opinion Survey (POS) was administered to sample members in Atlanta, Grand Rapids, Portland, and Riverside.

An F test was applied to differences among groups. Statistical significance levels are indicated as *** = 1 percent; ** = 5 percent; and * = 10 percent.

^aThe GED credential is given to those who pass the GED test and is intended to signify knowledge of high school subjects.

^bThis refers to the total number of months accumulated from one spell or more on an individual's own or spouse's AFDC case. It does not include AFDC receipt under a parent's name.

^cThis includes individuals who do not have a high school diploma, who received welfare for 2 years or more prior to random assignment, and who were not employed in the year before random assignment.

^dThis does not mean that such individuals are new to the AFDC rolls, only that this is their first spell on AFDC. This spell, however, may have lasted several years.

Education and basic skills. The most successful group had the highest levels of education and skill levels. Almost three-quarters had received their high school diploma or GED before random assignment (compared to 55 percent for those who were least successful). Most of the differences across groups is explained by the receipt of a high school diploma, not a GED. The group who was most successful in sustaining employment was also twice as likely to have a technical or two-year degree (10 percent vs. 4 percent). Differences across skill levels were significant but not as large: 62 percent of those who were most successful in sustaining employment passed both the reading and math literacy test compared to 52 percent who were least successful.

Employment and welfare history. Work history is also an important factor in an individual's ability to sustain employment. Compared to the least successful group, those who were most successful in sustaining employment were more than twice as likely to have a recent work history at the time of random assignment. Forty percent (compared to 16 percent) of this group were employed in the quarter before random assignment. Sixty-two percent had earnings in the year before they were randomly assigned, compared to 34 percent who were least successful. Differences across the subgroups in prior welfare history were not large, although those who were least successful were somewhat more likely to be long-term recipients (received welfare five years or more). Interestingly, those who were most successful in sustaining employment were somewhat more likely to live in subsidized housing.

Personal barriers. Variation across a range of personal barriers to employment — depression, family and personal problems, family attachment (measuring a preference to stay home with children rather than returning to work), and locus of control (measuring the degree to which a person feels in control of her life) — was examined by responses to a Private Opinion Survey, completed at random assignment.⁵ As expected, those who were most successful in sustaining employment had fewer personal barriers to employment compared to those who were least successful. There were major differences between the two groups in terms of the proportion who reported family or personal problems (10 percent vs. 20 percent), family attachment (20 percent vs. 33 percent), and locus of control (17 percent vs. 26 percent). Differences were not as great on the depressive symptoms scale, with between 33 and 40 percent of program group members having a high or moderate barrier.

Other demographic characteristics. Among those welfare recipients who found work, there were not notable differences across the groups in terms of age, ethnicity, marital status, and number and age of children.

⁵ Scales for each of these factors were created based on several items on the POS. Factor analysis was conducted to determine meaningful scale components. Cronbach's alpha calculation, a statistical measure of a scale's reliability, was conducted on each factor-based scale. Coefficient alphas of .70 are considered acceptable. Scale scores were created by summing the value of the responses to items in each scale. These scores were used to determine whether an individual had a barrier on a given scale. The POS was completed just prior to when were randomly assigned.

B. Initial Job Characteristics and Other Employment-Related Issues

Table 7 summarizes variation in initial job characteristics as well as in the use of transitional Medicaid and child care benefits for those who were most and least successful in sustaining employment.

Initial job characteristics. Wages, benefits, and hours of the *initial* job individuals obtained were examined through a survey conducted two years after random assignment. The initial job is examined in detail because program operators may be able to influence the initial job individuals take when they are on cash assistance. For example, the NEWWS evaluation in Portland produced large impacts on earnings and employment in part by encouraging individuals to take "good" jobs.⁶ In addition, as shown above, the individuals who were most successful in sustaining employment were often still employed in their initial spell of employment at the end of the follow-up period, indicating that the characteristics of this job may have some effect on whether individuals are able to keep working.

- **Hours worked.** There was not a large variation in terms of the *average* number of hours worked in the initial job after random assignment, although there were some differences in the distribution of hours worked. The group who was most successful in sustaining employment was more likely to work in full-time jobs:
- 60 percent were working 40 or more hours per week (compared to roughly 48 percent for other groups). The group who was least successful, compared to the most successful, also had a higher proportion working 20 hours or less per week (18 percent vs. 6 percent).
- **Wages.** The average wage in the initial job was not substantially different across the groups: the average wage for the least successful group was \$6.34 per hour and the wage for the most successful group was \$6.76 per hour. In addition, the wages for the least successful group were actually higher on average than those who had moderate or limited success in sustaining employment. This could indicate that the least successful group was more likely to consider the pay when making a decision to take a job. A combination of moderately higher hours and wages resulted in the most successful group having higher average earnings per week.

⁶ Scrivener, Susan et al., *National Evaluation of Welfare-to-Work Strategies: Evaluating Alternative Welfare-to-Work Approaches: Implementation, Participation Patterns, Costs and Two-Year Impacts of the Portland (Oregon) Welfare-to-Work Program*, (Washington, DC: U.S. Department of Health and Human Services and U.S. Department of Education, 1998).

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Table 7
Characteristics of First Job and Use of Transitional Benefits for Employment-Focused
Program Members During the First Two Years of Follow-Up,
By Percent of Follow-Up in 4 Years

Outcome	Percent of Follow-up Employed			
	25% or less	26 to 50%	51 to 75%	76% to 100%
<u>Characteristics of first job</u>				
Hours of work per week	32.9	32.3	33.9	36.3
Hours of work per week (%)				
Less than 20	18.2	12.5	9.9	5.8
20 to 29	20.3	20.8	19.8	15.1
30 to 39	12.6	20.8	23.0	18.9
40	32.2	34.1	35.9	46.8
More than 40	16.7	11.9	11.3	13.4
Earnings per week (\$)	209	183	208	250
Earnings per week (%)				
Less than \$100	18.4	15.4	13.6	9.0
\$100 to \$199	33.8	42.2	40.9	25.5
\$200 to \$299	29.6	32.9	27.9	38.1
\$300 to \$399	8.4	7.2	11.5	16.2
\$400 or more	9.8	2.3	6.1	11.2
Earnings per hour (\$)	6.34	5.85	6.19	6.76
Earnings per hour (%)				
Less than \$4	12.4	12.5	11.5	6.7
\$4.00 to \$4.99	16.6	21.4	16.8	15.5
\$5.00 to \$5.99	25.9	28.4	28.0	22.1
\$6.00 to \$7.99	26.0	21.5	29.9	32.3
\$8.00 to \$9.99	4.3	9.2	6.6	11.7
\$10.00 or more	14.7	6.9	7.2	11.7
Benefits (%)				
Employer-provided medical insurance	16.6	20.4	25.0	44.1
Employer-provided dental insurance	12.3	16.3	19.7	34.9
Paid sick leave	14.2	15.4	26.3	43.6
Paid vacation	13.3	15.7	27.9	41.0

(continued)

Table 7 (continued)

Outcome	Percent of Follow-up Employed			
	25% or less	26 to 50%	51 to 75%	76% to 100%
Received medical coverage (%)				
Transitional Medicaid during years 1 and 2	25.6	33.2	46.3	46.7
Any private or public insurance at the end of two years	30.7	30.1	53.4	75.7
Employed and on welfare (received Medicaid)	15.5	15.1	21.6	15.6
Employed and off welfare	15.2	15.0	31.8	60.1
Used child care for employment during years 1 and 2 (%)				
Received transitional child care payments	12.1	13.7	16.1	20.9
Used paid child care	42.4	45.0	50.0	47.1
Paid out-of-pocket for child care expenses	34.4	33.8	36.7	42.0
Absent or late for work one or more days per month because of child care problems	29.6	23.0	30.0	24.6
Sample Size	254	250	281	406

SOURCE: MDRC calculations from the Two-Year Client Survey and from unemployment insurance (UI) earnings records.

NOTES: Measures shown in this table pertain to survey respondents who worked for pay, measured from UI earnings records, for one or more quarters during years 1 to 4. Differences among subgroups based on percent of follow-up employed are therefore not true experimental comparisons; statistical tests were not performed.

Measures were originally based on estimates of program-control differences for each subgroup.

Estimates were regression-adjusted using ordinary least squares, controlling for pre-random assignment characteristics of subgroup members. Programs were weighted equally. In addition, survey respondents in Atlanta, Grand Rapids, Riverside, and Portland are weighted by the inverse of their probability of selection for the survey to replicate the proportion of program and control group members in the full impact sample. Weighting was required in these sites because certain subgroups were overrepresented (for research purposes) among those chosen to be surveyed. This weighting procedure was not required for sample members in Columbus, Detroit, and Oklahoma City, because sample members' background characteristics did not affect their chances of self-selection.

Use of transitional child care and other child care issues. The group who was most successful in sustaining employment was also more likely to use transitional child care, although their usage rates were relatively low given that members averaged two-thirds of their quarters of employment off of welfare (see Table 5). Approximately 22 percent used this benefit within two years, compared to 12 percent in the least successful group. The group that was most successful in sustaining employment was more likely to pay out of pocket for child care expenses (in part this could be because they worked and earned more). There were no major differences across the groups in the extent to which they experienced child care problems that caused them to be absent or late for work.

Employer-sponsored health insurance and other benefits. Of the group who was most successful in sustaining employment, over twice as many had employer-provided medical insurance in their initial job, compared to those who were least successful (44 percent vs. 17 percent). The group that was most successful was also over twice as likely to have other employer benefits such as paid sick and vacation leave.

Use of transitional Medicaid. Usage rates for transitional Medicaid were twice as high for the group who was most successful in sustaining employment. Forty-seven percent used transitional Medicaid at some point during the two-year follow-up period, compared to 26 percent for the group who was least successful. The findings here on the role of transitional Medicaid in sustaining employment are particularly noteworthy. While it is likely that both individual characteristics (such as work experience or educational attainment) and finding "good jobs" with health insurance are linked to sustaining employment (making it difficult to determine which is the most important factor), this is less likely to be true for transitional Medicaid. Unlike finding a job with health insurance, participation in a publicly-funded program like transitional Medicaid should depend less on an individual's work experience, skills and or other characteristics. Thus, although this analysis does not establish a causal link, transitional Medicaid does appear to be an important factor in sustaining employment.

Overall, the analysis indicates that health insurance – whether it is provided from public or private sources – is important in sustaining employment. Over 75 percent of the most successful group were covered by private or public health insurance at the end of the two-year follow-up period for the survey (compared to 30 percent for the least successful group). This difference is primarily due to differences in health insurance coverage for those who were employed and left welfare.

VI. Characteristics of the Hardest-to-Employ: Individuals Who Never Worked in the Follow-up Period

As discussed above, approximately one-fifth of NEWWS program group members did not work during the follow-up period, according to UI records. Because this group is most likely to quickly reach time limits on cash assistance, there is an interest in understanding the characteristics and potential employment barriers of this group. Toward this end, as shown on Table 6, the demographic characteristics of those who did

not work during the follow-up period are examined.

Age and family status. Compared to the individuals who found jobs during the follow-up period, this was an older group with older children. Close to 40 percent of this group was over 35 (compared to 25 percent for the groups that worked for at least 1 quarter) and only 13 percent were under the age of 25 (compared to over 20 percent for the groups that worked for at least 1 quarter). This group also had older children, as might be expected given their age. Only 16 percent had a child under two (compared to roughly 25 percent for the groups that worked), and close to one-half had a youngest child who was over six (compared to 40 percent). This group was also more likely to have been married prior to random assignment.

Education and basic skills. Those who never worked had relatively low education and basic skills levels. Roughly one-half had a high school diploma or GED certificate, compared almost three-quarters of those who worked more than 75 percent of the follow-up period. They were also very likely to have low basic skills. Over 56 percent scored "low" on a basic skills literacy or math test (compared to 38 percent of the most successful group), with most doing poorly on the math section on the test. Over one-third were at high educational risk (no high school diploma and failed both the literacy and math test). This group was half as likely to have enrolled in education and training compared with at the time of random assignment, compared to those in most other groups.

Welfare and employment history. Program group members who never worked after random assignment were most likely to have a long history of welfare receipt: 42 percent had received welfare for five years or more (compared to 27 percent of the most successful group). Only 19 percent had earnings in the year before random assignment (compared to over 60 percent of the most successful group), although 64 percent had worked full-time for 6 months or more for one employer at some point in their lives. Interestingly, this group was equally likely to have grown up in a household that received AFDC and less likely to have had a child as a teenager than the groups that were able to obtain employment.

Personal barriers. There were differences across the groups in terms of the family barrier, locus of control, and family attachment scales. Notably, approximately 30 percent of those who never worked had a barrier according to the family or personal problem scale and according to the locus of control scale (compared to 10 and 17 percent, respectively, of the most successful group), and almost 40 percent had a barrier on the family attachment scale (compared to 20 percent of those who worked steadily).

It is important to note, however, that even within this relatively disadvantaged group of non-workers, a diverse range of welfare recipients is represented, including some with higher skills and education and no reported personal barriers.

VII. Summary

This analysis has identified a number of interesting findings about the work patterns of welfare recipients who find jobs. Work is common: approximately 80 percent of the NEWWS sample members worked at some point during the four-year follow-up period. On average, the group who found jobs was employed just over half of the follow-up period. A majority experienced one or two spells of employment. Those who ended an employment spell did so relatively quickly: the average spell length for this group was three quarters with roughly one-third becoming unemployed within one quarter. Those who did find a job after they lost their initial job did so after a relatively long period of unemployment – 2.8 quarters. Individuals who lose their initial job may be an important target group for post-employment services.

NEWWS sample members also experienced a diverse range of work patterns. One-quarter of the employed sample worked for a substantial portion of the four-year follow-up period (more than 75 percent). However, one-quarter of the employed sample worked 25 percent or less of the follow-up period. Individuals who were most and least successful in sustaining employment had different types of employment and earnings patterns.

- Those individuals who worked relatively continuously throughout the follow-up period started working relatively early in the follow-up period and were most likely to be in their initial or second job after random assignment. This group also experienced substantial earnings growth over the four-year follow-up period: earnings grew by close to 50 percent during this time.
- The group of individuals who were least successful in sustaining employment were more likely to have only one relatively short spell of employment and to start working later in the follow-up period. This group had very low levels of earnings and almost no growth in earnings during the follow-up period.
- Those who worked for a “moderate” portion of the follow-up period were more likely to experience multiple employment spells. This group had low to moderate levels of quarterly earnings and earnings growth.

In order to help policymakers understand which factors are important to who succeeds in sustaining employment and who does not, the analysis examined the variation in the composition of each of these groups in terms of their demographic characteristics as well as the characteristics of their initial jobs and their use of transitional Medicaid and child care. While the analysis does not establish a causal relationship between the characteristic and the ability to sustain employment, it does indicate factors that are linked to this outcome. Several findings are notable about this analysis.

- The group that was most successful in sustaining employment had higher education and basic skill levels, more recent work history, and fewer personal barriers (particularly family or personal problems, family attachment, and locus of control),

compared to the group that was least successful. There were small or negligible differences between the groups based on age, ethnicity, marital status and children, and depression levels; and a somewhat larger difference in prior welfare receipt.

- Health insurance – whether provided through public or private sources – appears to be critical if individuals are to sustain employment. The availability of employer-provided health insurance was twice as prevalent in the initial job among those who were most successful in sustaining employment, compared to those who were least successful. The most successful group was also twice as likely to have used transitional Medicaid. This indicates that health insurance is important in sustaining employment.
- The group who was most successful in sustaining employment was also more likely to use transitional child care, although their usage rates were relatively low given their employment status: Approximately 20 percent used this benefit within two years, compared to 12 percent in the least successful group.
- There were not large differences in the hourly wages of the initial job between those who were most and least successful in sustaining employment and only moderate differences in the hours worked.
- Those who did not work after random assignment were most likely to have low education and basic skills, limited work experience, and to score high on scales measuring family attachment, family problems, and locus of control. In addition, this was an older group of individuals who had somewhat older children and tended to be long-term welfare recipients with little recent work experience at the time of random assignment. It is important to note, however, that even within this defined group of non-workers, a diverse range of welfare recipients is represented – including some with higher skills and education and no reported personal barriers.

APPENDIX TABLES

National Evaluation of Welfare-to-Work Strategies

Appendix Table 1
Patterns of Employment for Education-Focused Program Group Members
Who Worked for Pay During Years 1 to 4,
by Percent of Follow-Up Period Employed

Employment Outcomes	Percent of Follow-up Employed			
	25% or less	26 to 50%	51 to 75%	76 to 100%
Quarters employed	2.4	6.5	10.5	14.6
Started working in (%):				
Year 1	35.6	52.0	66.3	100.0
Year 2	21.8	24.8	33.7	0.0
Year 3	18.3	23.1	0.0	0.0
Year 4	24.2	0.0	0.0	0.0
Quarters of initial joblessness ^a	6.5	4.0	2.4	0.6
Percent of quarters employed from quarter				
Change in earnings between first and last "1	38.7	60.3	79.0	95.0
quarter of employment" ^a				
Employment spells	1.4	2.2	2.2	1.5
Employment spells (%)				
1	65.0	30.5	29.0	59.3
2	27.6	36.2	34.1	30.9
3	6.8	22.6	25.8	8.0
4 or more	0.7	10.7	11.2	1.7
Employed at end of year 4 (%)	27.5	54.4	74.4	91.9
Sample size	2,145	1,819	1,791	1,912

(continued)

Appendix Table 1 (continued)

SOURCE: MDRC calculations from unemployment insurance (UI) records.

NOTES: See Table 4.

^a "Quarters of initial joblessness" is defined as the number of quarters following random assignment (quarter 1) and preceding the first quarter with earnings. Sample members who began working in quarter 2 have 0 quarters of initial joblessness.

^b The "quarter of initial job" is defined as the first quarter with earnings. The "percentage of quarters from quarter of initial job through the end of year 4" is calculated by: $\text{Quarters employed} / (16 - \text{quarters of initial joblessness}) \times 100$.

National Evaluation of Welfare-to-Work Strategies

Appendix Table 2
Patterns of Earnings, Welfare and Food Stamp Receipt, and Employment Stability for
Education-Focused Program Group Members Who Worked for Pay During
Years 1 to 4, by Percent of Follow-Up Period Employed

Employment Outcomes	Percent of Follow-up Employed			
	25% or less	26 to 50%	51 to 75%	76 to 100%
Average earnings per quarter employed (\$)	1,116	1,658	2,244	3,010
Earnings per quarter employed (%)				
Less than \$500	39.9	11.1	2.8	0.7
\$500-\$999	24.5	23.3	12.4	3.9
\$1,000-\$1,999	22.9	38.3	36.7	22.6
\$2,000-\$2,999	8.0	16.6	27.3	30.6
\$3,000-\$3,999	2.2	6.1	12.1	22.5
\$4,000-\$4,999	0.6	2.5	4.3	10.6
\$5,000 or more	1.8	2.1	4.4	9.1
Change in earnings between first and last "measured quarter of employment" ^a				
First quarter (\$)	277	1,687	2,217	2,352
Last quarter (\$)	291	1,932	2,813	3,646
Difference (\$)	15	245	596	1,294
Percentage change (%)	5.3	14.5	26.9	55.0
Quarters employed with earnings over \$2,500 (%)	11.5	23.6	37.4	55.6
Employed in all 4 quarters of year 4 (%)	3.8	31.1	56.1	84.3
Employed in a spell lasting 4 or more quarters with average earnings per quarter of \$2,500 or more (%)	1.4	20.2	38.3	62.2
Earned \$10,000 or more in year 4 (%)	1.6	16.8	35.0	64.0
Quarters employed (%)				
Received welfare	67.2	54.5	45.6	32.2
Received Food Stamps	73.2	64.5	58.4	46.9
Quarters not employed (%)				
Received welfare	67.6	69.3	72.7	67.2
Received Food Stamps	70.2	72.4	77.0	73.1
Sample size	2,145	1,819	1,791	1,912

(continued)

Appendix Table 2 (continued)

SOURCE: MDRC calculations from unemployment insurance (UI) records.

NOTES: See Table 4.

^a"Measured quarters of employment" occur after the first quarter of an employment spell and before the final quarter. "Non-measured quarters" (the first and last quarters of a spell) were excluded from this analysis because they typically include weeks of joblessness (before a job began or after it ended) and are therefore unreliable for estimating changes in average earnings per quarter of employment. The measures in this table were calculated for sample members with two or more "measured quarters of employment". At a minimum, these sample members worked for four consecutive quarters at some point in the follow-up or were employed for three quarters during two separate employment spells.

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National Evaluation of Welfare-to-Work Strategies

Appendix Table 3
Selected Characteristics of Education-Focused Program Group Members,
By Percent of Follow-Up Employed During Years 1 to 4

Characteristic	Percent of Follow-up Employed					Total
	Never Employed	25% or less	26 to 50%	51 to 75%	76 to 100%	
Age (%)						
Under 19	1.2	2.3	3.5	3.0	0.9	2.2 ***
19-24	12.6	21.0	25.5	23.9	20.0	20.5 ***
25-34	43.1	49.0	47.8	49.2	51.3	48.0 ***
35-44	32.7	23.8	19.9	21.0	25.1	24.5 ***
45 or over	10.5	4.0	3.3	2.9	2.8	4.8 ***
Under 30	32.6	48.1	52.3	50.9	46.5	46.0 ***
Over 30	67.4	51.9	47.7	49.1	53.5	54.0 ***
Average age (years)	33.7	30.4	29.6	29.7	30.6	30.8
Ethnicity (%)						
White	27.7	31.0	28.4	30.0	28.7	29.2
Hispanic	9.7	6.1	5.5	5.9	5.1	6.5 ***
Black	59.0	61.5	64.9	63.2	65.2	62.6 ***
Black Hispanic	0.0	0.1	0.0	0.0	0.2	0.1
Native American/Alaskan Native	0.7	0.7	0.4	0.3	0.4	0.5
Asian/Pacific Islander	2.2	0.4	0.5	0.3	0.4	0.8 ***
Other	0.8	0.3	0.3	0.3	0.1	0.4 **
Family status						
Marital status (%)						
Never married	49.1	57.2	60.2	60.1	55.5	56.4 ***
Married, living with spouse	6.5	3.9	4.1	3.3	4.0	4.4 ***
Separated	23.9	20.0	19.2	18.5	20.7	20.5 ***
Divorced	18.6	17.6	15.9	17.1	19.2	17.7 *
Widowed	1.9	1.3	0.5	1.0	0.7	1.1 ***

(continued)

Appendix Table 3 (continued)

Characteristic	Percent of Follow-up Employed					Total
	Never Employed	25% or less	26 to 50%	51 to 75%	76 to 100%	
Number of children (%)						
1	38.8	38.4	43.0	43.9	47.0	41.9 ***
2	31.9	33.2	32.0	32.2	31.6	32.2
3 or more	29.3	28.4	25.1	23.9	21.4	25.8 ***
Has any child (%)						
Age 0-5	47.4	56.5	58.9	58.2	50.7	54.4 ***
Age 6-11	53.7	49.7	49.1	49.0	51.1	50.5 **
Age 12-18	45.3	37.2	33.5	33.7	36.5	37.4 ***
Age of youngest child (%)						
2 or under	14.8	22.4	25.1	22.9	16.6	20.4 ***
3 to 5	32.6	34.1	33.8	35.2	34.1	34.0
6 or over	52.6	43.5	41.1	41.8	49.3	45.6 ***
Had a child as a teenager (%)	34.0	45.7	48.6	45.8	42.5	43.3 ***
Education status						
Received high school diploma or GED (%)	39.2	42.1	51.5	57.7	66.8	50.7 ***
Highest degree/diploma earned (%)						
GED ^a	4.7	6.2	8.3	6.8	7.5	6.7 ***
High school diploma	30.2	31.2	37.1	43.2	50.0	37.8 ***
Technical/AA/2-year college	3.5	4.3	5.7	6.6	8.0	5.5 ***
4-year (or more) college	0.9	0.7	0.9	1.1	1.5	1.0
None of the above	60.7	57.6	48.1	42.3	33.0	49.1 ***
Highest grade completed in school (average)	10.6	10.9	11.1	11.3	11.6	11.1

(continued)

Appendix Table 3 (continued)

Characteristic	Never Employed	Percent of Follow-up Employed				Total
		25% or less	26 to 50%	51 to 75%	76 to 100%	
Enrolled in education or training at time of random assignment (%)	12.4	19.2	23.5	23.5	18.7	19.4 ***
Baseline literacy and math tests (%)						
Low score on either literacy or math test	72.2	66.5	62.3	55.3	53.4	62.6 ***
Low score on literacy test	47.0	45.5	44.1	40.3	36.5	43.1 ***
Low score on math test	66.3	61.2	55.1	45.1	44.1	55.2 ***
Low score on both literacy and math tests	41.1	40.2	37.0	30.1	27.2	35.7 ***
Passed both literacy and math tests	27.8	33.5	37.7	44.7	46.6	37.4 ***
Educational Risk (%)						
Low (high school diploma and pass literacy and math)	11.8	15.8	20.9	29.5	36.2	21.9 ***
Medium (either high school diploma or pass literacy and math)	40.0	41.1	44.1	43.4	44.1	42.4
High (no high school diploma and didn't pass literacy or math)	48.3	43.0	35.0	27.1	19.8	35.7 ***
Labor force status						
Worked full time for 6 months or more for one employer (%)	51.1	50.6	55.8	59.6	67.4	56.4 ***
Employed during the quarter before random assignment (%)	6.8	16.6	22.9	32.5	50.8	24.9 ***
Any earnings in past 12 months (%)	16.3	32.0	43.7	52.6	71.5	42.0 ***
Employed at time of random assignment (%)	2.3	4.1	5.0	7.7	15.6	6.6 ***
Public assistance status						
Received welfare during the quarter before random assignment (%)	84.9	84.5	84.6	81.5	78.1	82.9 ***

(continued)

Appendix Table 3 (continued)

Characteristic	Never Employed	Percent of Follow-up Employed				Total
		25% or less	26 to 50%	51 to 75%	76 to 100%	
Total prior AFDC receipt (%) ^b						
None	2.5	2.7	2.6	3.0	4.0	2.9 *
Less than 1 year	15.3	16.3	17.0	19.3	22.0	17.8 ***
1 year or more but less than 2 years	8.7	10.7	13.9	12.8	14.2	11.9 ***
2 years or more but less than 5 years	22.9	24.9	27.6	27.4	27.3	25.9 ***
5 years or more but less than 10 years	20.9	22.4	19.7	20.0	17.4	20.2 ***
10 years or more	29.7	23.0	19.2	17.6	15.2	21.2 ***
Most disadvantaged recipient (%) ^c	40.8	32.2	21.7	16.7	6.4	24.4 ***
Raised as a child in a household receiving AFDC (%)	27.4	32.5	31.4	31.6	26.6	30.0 ***
First spell of AFDC receipt (%) ^d	11.9	11.7	12.4	14.1	14.9	12.9 **
Received Food Stamps in the year prior to random assignment (%)	86.1	88.3	89.7	87.8	85.9	87.6 ***
Housing status						
Current housing status (%)						
Public housing	14.9	14.5	12.9	13.0	12.6	13.6
Subsidized housing	13.6	12.9	14.9	15.8	17.5	14.8 ***
Emergency or temporary housing	0.7	1.5	1.3	2.2	0.8	1.3 ***
None of the above	70.8	71.2	70.8	69.0	69.1	70.3

(continued)

Appendix Table 3 (continued)

Characteristic	Never Employed	Percent of Follow-up Employed				Total
		25% or less	26 to 50%	51 to 75%	76 to 100%	
POS family or personal problem scale (%)						
No barrier	68.3	77.8	82.3	86.9	89.7	80.6 ***
Barrier	31.7	22.2	17.8	13.1	10.3	19.4 ***
POS family attachment scale (%)						
No barrier	62.8	70.7	74.6	73.9	80.5	72.1 ***
Barrier	37.2	29.3	25.4	26.1	19.5	27.9 ***
POS depressive symptoms scale (%)						
No barrier	55.2	59.3	61.0	64.8	64.6	60.8 *
Moderate barrier	30.0	25.3	22.4	20.7	22.7	24.4 *
High barrier	14.8	15.5	16.5	14.5	12.7	14.8
POS locus of control scale (%)						
No barrier	63.5	66.9	73.3	75.2	79.0	71.2 ***
Barrier	36.5	33.1	26.7	24.8	21.0	28.8 ***
Sample size	1,909	2,145	1,819	1,791	1,912	9,576

(continued)

Appendix Table 3 (continued)

SOURCE: MDRC calculations from information routinely collected by welfare staff and from unemployment insurance (UI) earnings records.

NOTES: See Table 6.

^aThe GED credential is given to those who pass the GED test and is intended to signify knowledge of high school subjects.

^bThis refers to the total number of months accumulated from one spell or more on an individual's own or spouse's AFDC case. It does not include AFDC receipt under a parent's name.

^cThis includes individuals who do not have a high school diploma, who received welfare for 2 years or more prior to random assignment, and who were not employed in the year before random assignment.

^dThis does not mean that such individuals are new to the AFDC rolls, only that this is their first spell on AFDC. This spell, however, may have lasted several years.

National Evaluation of Welfare-to-Work Strategies

Appendix Table 4
Characteristics of First Job and Use of Transitional Benefits for Education-Focused
Program Members During the First Two Years of Follow-Up,
By Percent of Follow-Up in 4 Years

Outcome	All Employed	Percent of Follow-up Employed			
		25% or less	26 to 50%	51 to 75%	76% to 100%
<u>Characteristics of first job</u>					
Hours of work per week	32.7	31.9	32.7	34.7	33.0
Hours of work per week (%)					
Less than 20	11.6	10.0	15.3	6.7	7.5
20 to 29	22.2	26.8	20.8	20.7	20.0
30 to 39	18.9	21.3	13.8	17.9	22.6
40	37.2	28.0	38.3	46.5	45.2
More than 40	10.1	13.9	11.7	8.2	4.7
Earnings per week (\$)	193	178	193	210	209
Earnings per week (%)					
Less than \$100	20.4	24.9	23.1	11.1	13.7
\$100 to \$199	35.8	40.1	34.3	36.5	34.2
\$200 to \$299	29.0	21.2	27.2	34.1	35.0
\$300 to \$399	8.9	6.5	8.4	12.0	11.5
\$400 or more	6.0	7.3	6.9	6.2	5.6
Earnings per hour (\$)	5.90	5.84	5.92	5.98	6.41
Earnings per hour (\$)					
Less than \$4	14.9	24.5	12.7	11.7	8.3
\$4.00 to \$4.99	19.0	17.1	24.1	16.9	15.2
\$5.00 to \$5.99	25.6	17.8	26.5	27.5	26.3
\$6.00 to \$7.99	24.9	23.2	21.7	28.1	30.2
\$8.00 to \$9.99	7.8	6.9	5.2	10.5	10.3
\$10.00 or more	7.8	10.5	9.8	5.5	9.7
Benefits (%)					
Employer-provided medical insurance	23.8	13.7	22.5	29.5	32.6
Employer-provided dental insurance	20.8	7.5	20.0	24.7	28.3
Paid sick leave	24.8	12.2	26.4	29.6	32.6
Paid vacation	21.9	11.0	22.2	22.1	30.6

(continued)

Appendix Table 4 (continued)

Outcome	All Employed	Percent of Follow-up Employed			
		25% or less	26 to 50%	51 to 75%	76% to 100%
Received medical coverage (%)					
Transitional Medicaid during years 1 and 2	34.3	24.3	29.7	37.8	48.4
Any private or public insurance at the end of two years	54.2	38.2	42.2	62.0	70.3
Employed and on welfare (received Medicaid)	22.4	25.5	22.2	27.8	11.7
Employed and off welfare	31.8	12.7	20.0	34.2	58.6
Used child care for employment during years 1 and 2 (%)					
Received transitional child care payments	10.1	4.1	6.7	13.4	16.0
Use paid child care	43.1	37.8	44.2	47.5	47.3
Paid out-of-pocket for child care expenses	37.4	34.0	37.9	40.8	43.0
Absent or late for work one or days per month because of child care problems	22.4	21.9	25.7	24.2	19.9
Sample size	1842	306	389	501	542

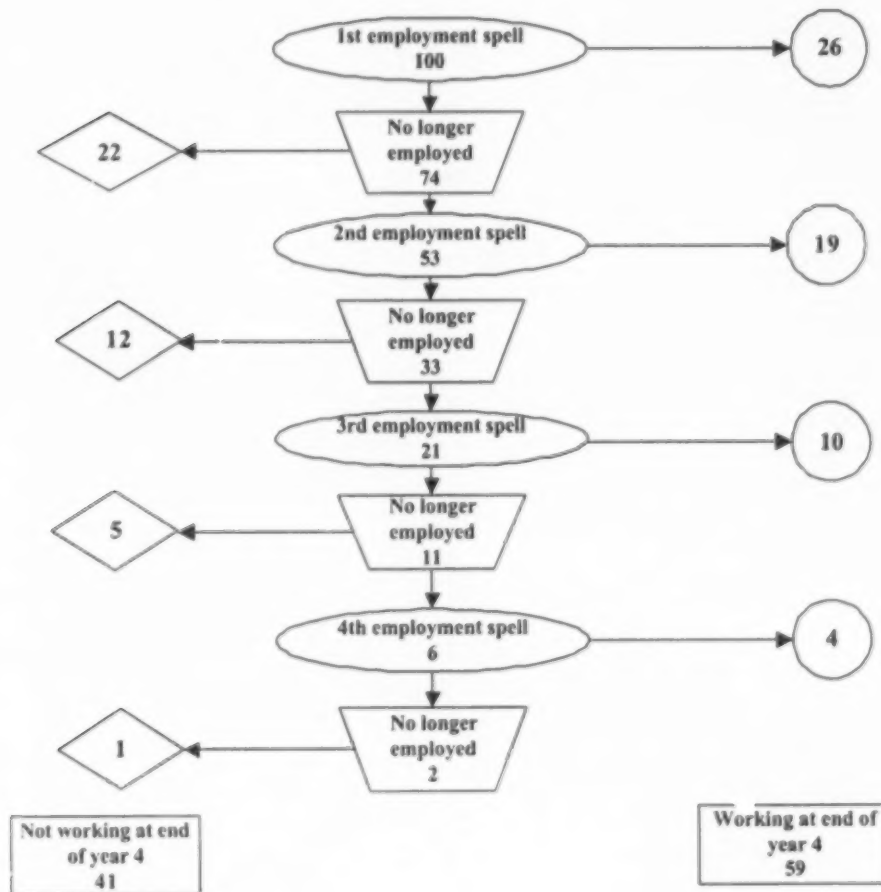
SOURCE: MDRC calculations from the Two-Year Client Survey and from unemployment insurance (UI) earnings records.

NOTES: See Table 7.

National Evaluation of Welfare-to-Work Strategies
Appendix Figure 1
Employment Experiences of 100 Education-Focused Program Group Members
Who Worked for Pay During Years 1 to 4

No further employment
through end of year 4

Continued working for
pay through end of year 4



References

- Berlin, Gordon L. 2000. *Encouraging Work Reducing Poverty: Impacts on Work Incentive Programs*. New York: Manpower Demonstration Research Corporation.
- Dodoo, Martey. 2000. *Evaluating Alternative Welfare-to-Work Approaches: Four-Year Impacts for Eleven Programs*. Washington, D.C.: U.S. Department of Health and Human Services, Administration for Children and Families and Office of the Assistant Secretary for Planning and Evaluation; and U.S. Department of Education, Office of the Under Secretary and Office of Vocational and Adult Education.
- Freedman, Stephen, Daniel Friedlander, Gayle Hamilton, JoAnn Rock, Marisa Mitchell, Jodi Nudelman, Amanda Schweder, and Laura Storto. 2000. *Evaluating Alternative Welfare-to-Work Approaches: Two-Year Impacts for Eleven Programs*. Washington, D.C.: U.S. Department of Health and Human Services, Administration for Children and Families and Office of the Assistant Secretary for Planning and Evaluation; and U.S. Department of Education, Office of the Under Secretary and Office of Vocational and Adult Education.
- Freedman, Stephen. 2000. *Four-Year Impacts of Ten Programs on Employment Stability and Earnings Growth*. Washington, D.C.: U.S. Department of Health and Human Services, Administration for Children and Families and Office of the Assistant Secretary for Planning and Evaluation, and U.S. Department of Education, Office of the Under Secretary and Office of Vocational and Adult Education.
- Friedlander, Daniel, and Gary Burtless. 1995. *Five Years After: The Long-Term Effects of Welfare-to-Work Programs*. New York: Russell Sage Foundation.
- Knox, Virginia, Cynthia Miller, and Lisa A. Gennetian. 2000. *Reforming Welfare and Rewarding Work: A Summary of the Final Report on the Minnesota Family Investment Program*. New York: Manpower Demonstration Research Corporation.
- Martinson, Karin. 2000. *The Experiences of Welfare Recipients Who Find Jobs*. Washington, D.C.: U.S. Department of Health and Human Services, Administration for Children and Families and Office of the Assistant Secretary for Planning and Evaluation; and U.S. Department of Education, Office of the Under Secretary and Office of Vocational and Adult Education.
- Michalopoulos, Charles, and Christine Schwartz, with Diana Adams-Ciardullo. 2000. *What Works Best for Whom: Impacts of 20 Welfare-to-Work Programs by Subgroup. Executive Summary*. U.S. Department of Health and Human Services, Administration for Children and Families and Office of the Assistant Secretary for Planning and Evaluation; and U.S. Department of Education, Office of the Under Secretary and Office of Vocational and Adult Education.

Rangarajan, Anu, Peter Schochet, and Dexter Chu. 1998. *Employment Experiences of Welfare Recipients Who Find Jobs: Is Targeting Possible?* Princeton, NJ: Mathematica Policy Research, Inc.

Rangarajan, Anu, and Tim Novak. 1999. *The Struggle to Sustain Employment: The Effectiveness of the Post-Employment Services Demonstration. Final Report.* Princeton, NJ: Mathematica Policy Research, Inc.

Scrivener, Susan, Gayle Hamilton, Mary Farrell, Stephen Freedman, Daniel Friedlander, Marisa Mitchell, Jodi Nudelman, and Christine Schwartz. 1998. *Implementation, Participation, Costs, and Two-Year Impacts of the Portland (Oregon) Welfare-to-Work Program.* Washington, D.C.: U.S. Department of Health and Human Services, Administration for Children and Families and Office of the Assistant Secretary for Planning and Evaluation; and U.S. Department of Education, Office of the Under Secretary and Office of Vocational and Adult Education.

Strawn, Julie, and Karin Martinson. 2000. *Steady Work and Better Jobs: How to Help Low-Income Parents Sustain Employment and Advance in the Work Force.* New York: Manpower Demonstration Research Corporation.